

Amendments to the Drawings:

Fig. 1 has been amended to change "UN" to "Nu" and to change "NS" to "Ns," to better accord with the description thereof in the specification.

In addition, Fig. 7 has been amended to show an image forming apparatus that is able to communicate with more than one child relaying server and with a parent relaying server, and to show a child relaying server that is able to communicate with more than one parent relaying server.

Attachment: Annotated Sheets Showing Changes
 Replacement Sheets

R E M A R K S

Reconsideration of this application, as amended, is respectfully requested.

ALLOWABLE SUBJECT MATTER

The Examiner's indication of the allowability of the subject matter of claims 12, 21, 22, 27, 28, 30-34, 51 and 63-65 is respectfully acknowledged.

These claims, however, have not been rewritten in independent form at this time since, as set forth in detail hereinbelow, it is respectfully submitted that new independent claims 75, 103 and 126 also recite allowable subject matter.

THE SPECIFICATION

The abstract has been amended to better comply with the requirements of MPEP 608.01(b), as required by the Examiner, as well as to make some minor grammatical improvements.

No new matter has been added, and it is respectfully requested that the amendments to the abstract be approved and entered, and that the objection to the specification be withdrawn.

THE DRAWINGS

Fig. 1 has been amended as described hereinabove to better accord with the description thereof in the specification. In

addition, Fig. 7 has been amended to show an image forming apparatus that is able to communicate with more than one child relaying server and with a parent relaying server, and to show a child relaying server that is able to communicate with more than one parent relaying server, as recited now canceled original claims 24, 30 and 32 and in new claims 92, 97, 98, 115, 120 and 121.

Submitted herewith are corrected sheets of formal drawings which incorporate the amendments and annotated sheets showing the changes made thereto.

No new matter has been added, and it is respectfully requested that the Examiner's objection to the drawings also be withdrawn.

THE CLAIMS

Claims 1-74 have been canceled, and claims 75-139 have been added based on the subject matter of the original claims.

No new matter has been added, and it is respectfully requested that new claims 75-139 be approved and entered.

It is respectfully submitted, moreover, that claims 75-139 fully comply with the requirements of 35 USC 112, second paragraph, and it is respectfully requested that the rejection thereunder be withdrawn.

THE PRIOR ART REJECTION

Claims 1-11, 13-20, 23-26, 29, 35-50, 52-62 and 66-74 were rejected under 35 USC 103 as being obvious in view of various combinations of US 2004/0012807 ("Konishi"), USP 6,473,788 ("Kim et al"), USP 5,893,005 ("Ogura"), USP 6,519,053 ("Motamed et al") and USP 6,788,429 ("Clough et al"). These rejections, however, are respectfully traversed with respect to new claims 75-139 set forth hereinabove.

According to the present invention as recited in new independent claims 75 and 103, an image forming apparatus administration system is provided which comprises an image forming apparatus, located in a first local network and connected to the Internet through a first firewall server of the first local network, and an administration apparatus, located in a second local network and connected to the Internet through a second firewall server of the second local network.

According to the present invention as recited in new independent claim 126, moreover, an image forming apparatus is provided which is located in a first local network and connected to the Internet through a first firewall server of the first local network. The image forming apparatus communicates with an administration apparatus that is located in a second local network and connected to the Internet through a second firewall server of the second local network.

As described in the background of the invention section of the specification, firewalls prevent effective communication between an image forming apparatus in a first local network and an administration apparatus in a second local network, when the image forming apparatus and administration apparatus connect to the network via firewalls.

Therefore, according to the present invention as recited in new independent claims 75 and 103, the image forming apparatus administration system comprises at least one relaying server, located outside the first local network and the second local network and connected to the Internet.

According to the present invention as recited in new independent claim 75, moreover, the image forming apparatus comprises a transmitting section which transmits first information representing a state of the image forming apparatus to the relaying server; the relaying server comprises a relaying storage for storing the first information; the administration apparatus comprises an accessing section which accesses the relaying server to obtain the first information stored in the relaying storage; the administration apparatus comprises a transmitting section which transmits second information to the relaying server, said second information being stored in the relaying storage; and the image forming apparatus comprises an accessing section which accesses the relaying server to obtain

the second information from the relaying storage, and the image forming apparatus is controlled in accordance with the second information.

With this structure, even though the image forming apparatus and administration apparatus are connected to the Internet through firewalls, it is possible for the image forming apparatus to obtain the second information transmitted from the administration apparatus, so that the image forming apparatus can be controlled in accordance with the second information.

In addition, according to the present invention as recited in new independent claim 103, the image forming apparatus comprises a transmitting section which transmits first information representing a state of the image forming apparatus to the relaying server; the relaying server comprises relaying storage for storing the first information; and the administration apparatus comprises an accessing section which accesses the relaying server to obtain the first information stored in the relaying storage.

With this structure, even though the image forming apparatus and administration apparatus are connected to the Internet through firewalls, it is possible for the administration apparatus to obtain the first information from the image forming apparatus.

Still further, according to the present invention as recited in new independent claim 126, the image forming apparatus comprises a communication section which accesses a relaying server to obtain information stored on the relaying server, and a control section which controls the image forming apparatus in accordance with the information. And according to new independent claim 126, the relaying server is located outside the first local network and connected to the Internet.

With this structure, even though the image forming apparatus and administration apparatus are connected to the Internet through firewalls, it is possible for the image forming apparatus to obtain information from the administration apparatus, so that the image forming apparatus can be controlled in accordance with the information.

As recognized by the Examiner, Fig. 16 of Konishi shows a printer 71 that transmits status information to a host computer 21, 51 via a relay server 31.

However, it is respectfully submitted that Konishi clearly does not disclose, teach or suggest that the printer 71 is located in a first local network and connected to the Internet through a first firewall server, that the host computer 21, 51 is located in a second local network and connected to the Internet through a second firewall server of the second local network, and

that the relaying server 31 is located outside the first local network and the second local network and connected to the Internet, in the manner of the image forming apparatus, administration apparatus, and relaying server(s) of the claimed present invention.

Indeed, it is respectfully pointed out that according to Konishi, the relaying server 31 is locally connected to the printer 71. Therefore, it is respectfully submitted that the relaying server 31 clearly does not correspond to the relaying server of the claimed present invention which is located outside both the first local network (in which the image forming apparatus is provided) and the second local network (in which the administration apparatus is provided) and connected to the Internet.

As acknowledged by the Examiner on page 7 of the Office Action, moreover, Konishi does not disclose two local networks, and Konishi does not disclose that the image forming apparatus and administration apparatus are provided in different local networks and connect to the internet through firewalls.

For this reason, the Examiner has cited Kim et al to supply the missing teachings of Konishi.

According to Kim et al, packets of information are sent between remote service organizations such as tech support and

sales organizations and a copier 11 over the internet via modem/routers 2, 5 and 7.

It is respectfully submitted, however, that Kim et al also does not disclose, teach or suggest a relaying server which is located outside both the first local network (in which the image forming apparatus is provided) and the second local network (in which the administration apparatus is provided) and connected to the Internet.

The Examiner asserts on page 7 of the Office Action that routers are known to include firewalls.

It is respectfully pointed out, however, that according to Kim et al packets of information are freely transmitted to and from the copier 11 via the router 7. It is respectfully submitted, therefore, that Kim et al clearly does not recognize the problem solved by the present invention whereby firewalls inhibit communication with an image forming apparatus. And it is respectfully pointed out that the Examiner has not provided any evidence to support the assertion that firewalls are present in the routers of Kim et al.

In summary, it is respectfully submitted that Konishi and Kim et al do not recognize the communication problems caused by firewalls that are solved by the claimed present invention, and it is respectfully submitted that neither Konishi nor Kim et al

discloses, teaches or suggests at least one relaying server located outside the first local network and the second local network and connected to the Internet, in the manner of the claimed present invention.

Therefore, it is respectfully submitted that Konishi and Kim et al do not disclose, teach or suggest the structure for communication between an image forming apparatus and administration apparatus via relay server as recited in new independent claims 75, 103 and 126.

Applicants have studied the remaining cited references and have found them to be no more pertinent.

In view of the foregoing, it is respectfully submitted that new independent claims 75, 103 and 126, as well as claims 76-102, 104-125 and 127-139 respectively depending therefrom, all clearly patentably distinguish over Konishi and Kim et al, taken together or in combination with any of the other cited references, under 35 USC 103.

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Entry of this Amendment, allowance of the claims and the passing of this application to issue are respectfully solicited.

Application No. 09/881,925
Response to Office Action

Customer No. 01933

If the Examiner has any comments, questions, objections or recommendations, the Examiner is invited to telephone the undersigned at the telephone number given below for prompt action.

Respectfully submitted,



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FIG. 1



